



**Public Service
of New Hampshire**

The Northeast Utilities System

PSNH Energy Park
780 North Commercial Street
Manchester, NH 03101

August 4, 2005

Howard B. Bernstein
RPS Program Manager
Massachusetts Division of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
E-mail: rps.doer@state.ma.us

Dear Mr. Bernstein:

Public Service Company of New Hampshire (PSNH) is not supportive of changes proposed in the Massachusetts Division of Energy Resources (DOER) *Notice of Inquiry* (NOI), dated July 1, 2005. We believe that the existing Renewable Portfolio Standard (RPS) in Massachusetts has worked well to encourage development of new renewable energy facilities in New England, and believe that the proposal in the NOI will undermine the fundamental tenants of the RPS. Further, we believe that to alter the direction of the RPS in the manner proposed by the NOI will create a flood of additional RECs to the market, crushing REC prices and discouraging the development of new renewable energy facilities.

PSNH is the owner and developer of the Northern Wood Power Project (NWPP) at Schiller Station, in Portsmouth, New Hampshire. This is a new 50 MW biomass facility that is replacing an older coal-fired boiler. This project, scheduled to go on-line in the middle of 2006, will provide significant economic and environmental benefits to the region. This is the type of new project the Massachusetts RPS was designed to encourage. This \$75 million project was pursued based, to a great extent, upon the Massachusetts RPS program. If the option to acquire and inexpensively retrofit existing stoker grate biomass facilities was available at that time, PSNH would have carefully evaluated its potential for use by other biomass energy producers, and may not have pursued the Northern Wood Power Project. While we are already committed to our

project, we suspect that other biomass project developers will carefully reassess any new facility construction if the proposed rules are adopted.

To Change Requirements mid-stream establishes a bad precedent, and will place a chilling effect on future New Renewable development

PSNH believes that the current proposal to modify the Massachusetts Renewable Energy Certificates (RECs) eligibility requirements to include existing facilities that make modest changes to their pollution control equipment is inconsistent with the requirements of Chapter 25A for “new” biomass facilities or previously-operated biomass facility retrofitted with advanced conversion technologies. This proposal is born out of a short term fear that new renewable energy facilities will not be developed to bring enough renewable energy to the marketplace over time. To the contrary, additional new renewable projects are being proposed and developed to meet this REC demand, such as the Northern Wood Power Project. It is important to note that, according to scenarios presented by DOER, the REC market is not expected to be significantly out of balance in coming years.¹ Under both of DOER’s “most likely” and “maximum development” scenarios, the supply of RECs is greater than regional demand in 2006, 2007 and 2008; and the supply of RECs is ahead of regional demand by 2008 in the “minimum development” scenario.

A key fundamental driver in economic development of projects, such as NWPP and others under consideration, is a healthy REC market and supportive REC pricing. The nature of the power generation business is that it is capital intensive and takes considerable time to go from concept to in-service. Projects are in the pipeline today to meet the REC demand, over the longer term. If it is expected that the REC market will allow for reasonable financial support of these new renewable projects, they will go forward and will supply desired new renewable energy. If it is expected that the rules, and therefore the REC market, will be in a state of uncertainty and flux, new renewable investors will withdraw from New England and shortages of new renewable energy will be seen.

To change the rules of the game by changing the REC eligibility requirements damages the confidence of current and future project owners and developers and raises question if the DOER is truly committed to the development of new renewable energy projects. If the DOER demonstrates that it is willing to open the door to a new supply of REC eligible projects, especially from existing facilities, such as is being considered in the NOI, developers will have a negative example to point to creating the expectation that if a shortfall in RECs is feared in the future, the faucet will be opened again, allowing an additional class of suppliers to enter the market. If this is the case, new renewable developers will refrain from entering the market, in anticipation that their risks in new renewable investments will not provide adequate return.

¹ Commissioner David O’Conner, MA Division of Energy Resources. *Portfolio Standards and the Supply of Renewable Energy in New England*. April 29, 2005.

Those projects who have made substantial financial commitments to meet the objectives and standards as previously established by the Department, did so in good faith, expecting those rules to apply into the future for others to comply with. If the DOER is committed to going forward with this change in policy direction, then adequate financial protection must be provided to previously announced projects that have received Advisory Rulings from the Department.

PSNH is supportive of the continued operation of existing biomass energy facilities but such continued operation should not be at the expense of the development of new biomass and other renewable energy facilities. Most existing biomass energy facilities have been in operation for 15 to 20 years and simply do not require the REC market support that new facilities require.

Potential to Flood REC Market

PSNH objects to the proposal to end the categorical exclusion of pile burn and stoker-grate technologies from participating in the RPS. Lifting this exclusion has the potential to allow a large number of existing facilities to inexpensively enter the RPS market, driving REC prices downward to a point where new investment is discouraged. As noted in *Platt's Megawatt Daily*, "Massachusetts' efforts to revamp renewable portfolio standard rules could thwart wind development and crush New England's fledgling renewable energy certificate (REC) trading market..."² Based upon figures on other biomass facilities in the region provided by DOER, at least ten facilities with a capacity of 254 MW could retool and participate in the RPS.³ These facilities have the potential to flood the regional REC market with almost 2 million RECs a year; roughly the size of the 2006 Connecticut Class 1 and Massachusetts REC markets *combined*, and a demand level that Massachusetts is not anticipated to reach until 2008. If biomass facilities associated with Maine paper mills can re-tool and participate in the RPS, this could mean up to another 328 MW of capacity (with an equivalent addition of 2.4 million RECs per year).

If these facilities retrofit and participate in the REC market, supply could move well ahead of demand and prices for RECs would plummet. This would have the consequence of halting development of new renewable energy generation in the region, undercutting the public policy goal of the RPS. As noted in the NOI:⁴

"If DOER were to set standards for advanced biomass power conversion technology that led to a significant expansion in RPS-qualified biomass power plant capacity, the supply of MA RECs in the market would increase. If supply were to move substantially ahead of demand, then the price of MA RECs would likely decline significantly. An expectation of such oversupply and price decline would likely deter the investment of capital in new plant construction, both for

² Platt's Megawatt Daily. "Mass RPS could flood, crush REC market." July 8, 2005.

³ MA DOER – RPS Biomass Notice of Inquiry, *Database of New England Biomass Units*. July 19, 2005.

⁴ Massachusetts Division of Energy Resources, Notice of Intent, July 1, 2005, Page 6.

biomass plants and for generation based on all other renewable resources (wind, solar, landfill methane, anaerobic digestion, etc.). Such a consequence would be counterproductive to the goals of new renewable generation expansion and increased fuel diversity.”

PSNH agrees with the DOER concerns that the standard for advanced technology, as proposed in the NOI, may lead to such an expansion of RPS-qualified generation, and will discourage development of new renewable generation in New England. So, the simple question is, “Why is the DOER proposing to fundamentally alter the Renewable Portfolio Standard?” The answer is unclear -- other than possible pressure being placed upon the DOER from retrofit technology projects and their developers.

Ability of Existing Facilities to Operate

Existing biomass facilities can, in fact, participate in the regional RPS market currently and changes to the rules are not necessary to allow this. One example is that facilities can opt to install a new fluidized bed boiler at a currently existing facility. This is the exact strategy that PSNH pursued for the Northern Wood Power Project, and advisory rulings for McNeil Station in Vermont, Greenville Steam in Maine, and Boralex facilities in Maine, demonstrate that this is an option. Alternatively, an existing biomass facility can retrofit and participate in the Connecticut Class 1 REC market, as Whitefield Power & Light in New Hampshire has done.

Finally, existing biomass facilities can operate and sell power without RECs. Facilities currently in operation enjoy a federal production tax credit, valued at roughly \$0.009 / KWH (\$9.00 / MWH). Also, existing facilities have had 15 to 20 years to amortize their initial investment and simply do not have the financial hurdle comparable to that of a new renewable energy facility. Given the current strong electricity markets, operating without RECs is certainly a viable option for many existing facilities. A number of facilities in the region have been doing this, and BioEnergy in New Hampshire is currently considering re-starting using clean chips.⁵ PSNH does not believe that changes to the existing Massachusetts RPS rules are necessary for existing biomass facilities to operate. A number of viable business options are currently available to them.

Advanced Technology

PSNH concurs with the Massachusetts DOER that “advanced technology” and “low emissions” are not synonymous, and urges that current individual standards be maintained. A reduction in emissions at existing biomass facilities, through modest investments, while laudable, does not represent “advanced technology.” The heat rate standard, as proposed in the NOI, is not practical and it would be very difficult to measure and verify. We believe that a standard for “advanced technology” should be

⁵ *Concord Monitor* (byline Joelle Farrell). “Senate votes to put brakes on Bio Energy Plan; Study of emissions would last a year.” June 10, 2005.

maintained. It is our experience that the current system works well and as intended by the statute.

Criteria to establish when a Biomass facility is “new”

We applaud the DOER’s efforts to define, in an open setting, those classes of facilities that will and will not qualify for participation in the REC market as new renewable energy providers. The case by case approach that has been taken to date, causes unneeded and undesirable uncertainty that impacts the REC market and the ability of developers of new renewable projects to determine if they will go forward with bringing new projects on-line.

The center of this debate then focuses on what the definition of “new” should be. Simply to retool an existing Stoker Grate boiler, does not meet the criteria of “Advanced Technology” and is in no way “new.” While the retooling at an existing Stoker Grate biomass plant may entail using advanced Stoker technology, that action does not qualify the retooled plant as one employing Advanced Technology per the statute.

PSNH would support utilizing the standards developed in California as a model for defining the criteria under which an existing facility could be retooled or retrofit to qualify as “new” for these purposes.

The following is an attempt to paraphrase the California definitions to be congruent with the Massachusetts RPS:

New: Resources that first begin commercial operation or are repowered on or after January 1, 2002, and meet the other eligibility requirements of the rules are considered “new” and thus eligible for RECs.

Repowered: Repowered generators will be eligible if they replace their prime generating equipment and use tax records or an acceptable alternative, to demonstrate that they have made capital investments in the facility equal to “at least 80 percent of the value of the repowered facility.”

Alternative Approaches

PSNH is not supportive of any changes to the Massachusetts RPS that would allow existing facilities to qualify without installing a new fluidized bed boiler or similar advanced technology at the facility as discussed above. However, if DOER is committed to expansion of participation in the RPS, PSNH would not object to the application of vintage requirements consistent with those that apply to other classes of Renewable Energy suppliers, giving existing biomass facilities access to the New Renewable market based upon their increase in output above the historic baseline. Such a vintage requirement would be appropriate for consideration in this case where existing facilities,

that would make minimal investment to fulfill the Advanced Technology requirements, are now proposed to be included in the eligibility requirements. Should the plants in question produce additional renewable based energy, above their historic levels, then it would be reasonable to consider those additional megawatt-hours as new renewable energy, eligible for RECs. If, and only if, these facilities retool to the extent discussed in the California or Rhode Island definitions of “new” as presented above, should all of their output be considered as new renewable energy and eligible for RECs.

Regarding the use of alternative renewable fuels, such as manufactured fuels or Construction and Demolition (C&D), to qualify a facility for RECs, PSNH would propose that a separate rule making process be undertaken to explore this topic. The public policy issues associated with these topics extend well beyond the scope of the central question posed in the NOI, that being the definition of facilities that should be eligible for consideration as providing new renewable energy under the Massachusetts RPS.

Emissions

PSNH has reviewed the proposed emissions standards, and believes that the emissions rates contained in Table 2 of the NOI are stringent but achievable. PSNH is building a new, state-of-the-art facility with advanced technology, and our analysis shows that we cannot meet the standards outlined in Table 3. The standards outlined in Table 3 are not reasonable or achievable.

For the Northern Wood Power Project, the engineering has been completed, the materials are being delivered and construction is in progress for operation in mid-2006. A change in the emissions requirements once a project has begun in good faith, based on current requirements, is both damaging and unfair. Should DOER be compelled to move the emissions requirements to be more stringent than those defined in Table 2, then PSNH requests that the Northern Wood Power Project be exempt from those new and revised requirements and be held only to those in place at the time of the granting of the Advisory Ruling.

The rules should also make clear that emissions are measured and reported as quarterly averages, and that single, time-limited exceedences of these standards (e.g., as a result of start-up, unanticipated fuel problems or other events) will not result in disqualification from the REC market for that quarter.

Closing

PSNH appreciates the opportunity to participate in this discussion, and would be pleased to discuss these issues with you at your convenience. PSNH believes that the existing RPS works well, and achieves the goal of encouraging new renewable energy

development in New England. The current proposal dilutes that objective, and we believe is not necessary.

If the DOER proceeds to include existing biomass facilities in its qualifications for Massachusetts RECs, then PSNH asks that the DOER reverse its proposed rules to have these existing facilities subject to vintage limitations consistent with those in place for other classes of Massachusetts eligible renewable power generators, or otherwise include provisions to honor the financial commitments that PSNH and other developers of new renewable energy facilities have made in reliance on the current, unmodified, REC eligibility requirements.

Sincerely,

A handwritten signature in black ink, reading "William H. Smagula". The signature is written in a cursive style with a large, stylized 'S' at the end.

William H. Smagula
Director – PSNH Generation

cc: Dwayne Breger, MA DOER
Dwayne.Breger@state.ma.us
Cindy Arcate, MA DOER
Cynthia.arcate@state.ma.us